

California Regional Water Quality Control Board  
North Coast Region

ORDER NO. R1-2003-0043

WASTE DISCHARGE REQUIREMENTS

FOR

INTERNATIONAL PAPER COMPANY  
FORMER MASONITE WOOD TREATMENT FACILITY  
CLOVERDALE

Sonoma County

The California Regional Water Quality Control Board, North Coast Region (hereinafter the Regional Water Board), finds that:

1. International Paper Company (hereinafter the discharger) submitted a report of waste discharge on October 29, 2002 proposing to conduct in-situ treatment of soil and groundwater contaminated with pentachlorophenol and arsenic at the former Masonite Wood Treatment Facility in Cloverdale, California.
2. The former Masonite Wood Treatment Facility is located approximately 0.5 mile east of Highway 101, approximately 1,500 feet west of the Russian River, and one mile southeast of the City of Cloverdale. The facility is approximately four acres in size and consisted of an operations building, chemical storage tanks, two pressure vessels or retorts, an unlined recycling pond, and wood storage areas. The facility operated from the late 1950's to 1975. In 1976, the facility was dismantled. Wood was treated with oil based pentachlorophenol, and water based chromated copper arsenate. The former Masonite facility was listed as a State Superfund site with oversight by the Department of Toxic Substances Control and Regional Water Board staff.
3. In 1990, the Department of Toxic Substance Control and Regional Water Board staff concurred with the draft Remedial Action Plan (RAP). The RAP proposed the removal of contaminated soil, backfill with clean material, and ongoing groundwater monitoring. The Agencies concurred with the RAP, and work proceeded in the summer of 1990. A total of 33,825 cubic yards of contaminated soil were removed from the site and disposed at a Class I facility near Kettleman City, California.
4. The removal of contaminated soils in 1990 resulted in the reduction of groundwater contamination at the site. However, contaminated soils adjacent to and underneath the railroad tracks were not removed because of the operating Southern Pacific Railroad. These contaminated soils are an ongoing source of contamination to groundwater in this area. Monitoring data indicate that groundwater concentrations in

this area continue to exceed the water quality objectives for pentachlorophenol and arsenic.

5. As shown on Attachment "A", there are 13 groundwater monitoring wells used to define the extent of groundwater contamination at the site.
6. The proposed project consists of in-situ treatment of arsenic and pentachlorophenol in soil and groundwater through temporary injection points surrounding and within the source areas. Injection of a 2,560 ppm iron and 4,878 ppm chloride mixture (ferric chloride) will be used to precipitate arsenic; and an Oxygen Release Compound (hereafter ORC®) consisting of a 117 ppm mixture of magnesium peroxide, magnesium oxide, and magnesium hydroxide will be used to enhance the degradation of pentachlorophenol. The in-situ treatment will be a one time application. There are four areas at the site which will be treated encompassing a total area of 20,625 square feet. The areas include the northeast and southwest sides of the North Coast Railroad Authority's rail line, and around Monitoring Well MW-23 (Attachment "A").
7. The treatment mechanism to reduce arsenic concentration in soil and groundwater involves a reaction between the residual arsenic and the injected ferric chloride solution to co-precipitate the arsenic. The treatment of pentachlorophenol contamination uses an ORC compound designed to stimulate in-situ microorganisms to degrade and reduce concentrations of pentachlorophenol.
8. The discharger has indicated that the residual ferric chloride will temporarily raise the levels of iron, chloride, and magnesium content in groundwater in the study area. The increase of iron, chloride, and magnesium will be restricted to the immediate vicinity of the treatment project. There are no domestic water wells in the immediate vicinity.
9. The direction of groundwater flow at the site is to the southeast, towards the Russian River.
10. The Regional Water Board's Water Quality Control Plan for the North Coast Region includes water quality objectives and receiving water limitations.
11. The beneficial uses of the Russian River and its tributaries include:
  - a. municipal and domestic supply
  - b. agricultural supply
  - c. groundwater recharge
  - d. navigation
  - e. hydropower generation
  - f. water contact recreation
  - g. noncontact water recreation
  - h. commercial and sport fishing
  - i. warm freshwater habitat

- j. cold freshwater habitat
  - k. wildlife habitat
  - l. preservation of rare and endangered species
  - m. migration of aquatic organisms
  - n. spawning reproduction, and/or early development
12. Beneficial uses of groundwater include: municipal, domestic, industrial and agricultural water supply as identified in the Water Quality Control Plan for the North Coast Region.
13. The Regional Water Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit written comments and recommendations.
14. The Regional Water Board, at a public meeting, heard and considered all comments pertaining to the discharge.
15. The permitted discharge is a minor cleanup action costing less than \$1 million taken to prevent, minimize, stabilize, mitigate, or eliminate the release of hazardous waste or substance and is therefore exempt from the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) pursuant to Title 14 California Code of Regulations Section 15530.
16. The permitted discharge is consistent with the anti-degradation provision of State Water Resources Control Board Resolution No. 68-16. The impact on existing water quality will be insignificant.

THEREFORE, IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

- 1. There shall be no discharge of waste to surface waters at any time as the result of in-situ remediation of arsenic and pentachlorophenol contaminated soil and groundwater.
- 2. The discharge of any waste not specifically regulated by this Order is prohibited.
- 3. Creation of a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code (CWC), is prohibited. [Health and Safety Code, Section 5411]
- 4. The discharge of waste to land that is not under the control of the discharger is prohibited.

5. The discharge of waste or the placement of contaminated material on property not specified in the report of waste discharge completed on October 29, 2002 or in this Order is prohibited.
6. Contaminated soil and groundwater treatment activities in areas where access by the general public is not controlled is prohibited.
7. The remediation of soil and groundwater without appropriate permits from any other agency having jurisdiction is prohibited.

#### B. SPECIFICATIONS

1. The discharge shall not cause the pH of the groundwater to be depressed below 6.5 nor raised above 8.0 during any of the treatment application periods; and the discharge shall not cause the pH of the groundwater to be changed more than 0.5 units from that which occurs naturally for more than 90 days beyond the date of initial discharge(s).
2. The discharger shall not cause the concentration of potential intermediary compounds including, but not limited to iron, chloride and magnesium to exceed a background concentration of not-detectable for more than one year beyond the date of initial discharge(s).

#### C. PROVISIONS

1. A copy of this Order shall be maintained by the discharger and be available at all times to operating personnel.
2. Severability

Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

3. Operation and Maintenance

The discharger must maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

4. Change in Discharge

The discharger must promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge.

5. Change in Ownership

In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger must notify the succeeding owner or operator of the following items by letter, a copy of which must be forwarded to the Regional Water Board:

- a. existence of this Order; and
- b. the status of the dischargers' annual fee account.

6. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from his liability under federal, State, or local laws, nor create a vested right for the discharger to continue the waste discharge.

7. Monitoring

The discharger must comply with the Contingency Planning and Notification Requirements Order No. 74-51, Monitoring and Reporting Program No. R1-2003-0043, and any modifications to these documents as specified by the Executive Officer. Such documents are attached to this Order and incorporated herein. Chemical analyses must be conducted at a laboratory certified for such analyses by the State Department of Health Services.

8. Inspections

The discharger shall permit authorized staff of the Regional Water Board:

- a. entry upon premises in which an effluent source is located or in which any required records are kept;
- b. access to copy any records required to be kept under terms and conditions of this Order;
- c. inspection of monitoring equipment or records; and
- d. sampling of any discharge.

9. Noncompliance

In the event the discharger is unable to comply with any of the conditions of this Order due to:

- a. breakdown of waste treatment equipment;
- b. accidents caused by human error or negligence; or
- c. other causes such as acts of nature;

the discharger must notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

10. This Regional Water Board requires the discharger to file a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

Certification

I, Susan A. Warner, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on March 27, 2003.

Ordered by: \_\_\_\_\_  
Susan A. Warner  
Executive Officer

(MasoniteWDRsPreliminary)